REAT DISCOVERIES

NELSON



,In Baic English, under the direction of C. K. OGDEN

воок б **GREAT DISCOVERIES**

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GREAT DISCOVERIES

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possible.

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GREAT DISCOVERIES

T

THE NORSEMEN

'Caw! caw! Caw! caw!"

The birds were making a great noise. They were tired of being prisoners for days. The waves came up against the sides of the boat on which their houses were hanging, and they were full of the desire to put out their wings and go on and on across the bright waters. The sailors, however, were not ready to let them go. Ravens the birds were—with smooth, bright, black feathers, and so much sense that they were taken to sea and used for pointing out the way to the land.

Sailors of to-day would make sport of the idea of getting help from birds in this way. Even as far back as the time of Henry Hudson, they were making use of the 'compass' for getting their whereabouts. But hundreds of years before Hudson's birth, Norse sailors were sailing the seas. They had no compasses. They got their direction by observation of the sun and stars. When they had an idea that they were near land they sent out their ravens as a test. The great black birds were let out of their houses and went

off over the sea. Then the ships went after the birds to the land.

The Norsemen were living in the far north of Europe. There the sea comes into the land, mak-



· The ships went after the birds to the land.

ing inlets and harbours. The inlets were named 'viks.' That is why the Norsemen were given the name of Vikings.

These tall, strong Vikings, with their waving light hair and bright blue eyes, were a danger to all who came near them. They had a way of

suddenly coming out of their viks and making attacks on the boats of other countries when they were going by. They were great fighters, ready for any danger, and the seamen of those days went in fear of them. Their ships were even smaller than Henry Hudson's *Half Moon*. They were made of wood, with the two ends going high up into the air.

The forward end was ornamented with the form of an animal cut out of wood. These were sometimes 'dragons' with wide-open mouths, like the one in the picture. Sometimes they were twisted snakes, all ready to make an attack. Seven hundred years back it was the general belief that strange, violent animals of great size were living in the seas. The dragons and other such things at the front of the Viking ships were for the purpose of putting fear into these animals of the deep, and keeping them at a distance.

A great number of men were needed to get these boats through the water. They made use of very long blades. Down the sides of the boat there were holes through which they put the blades. There was no apparatus for guiding the ship. Sometimes a small sail was used to get any wind which might be of help. It was naturally very hard to be certain you were sailing in the right direction when a ship had no compass or guiding apparatus.

Not only did these Vikings of old times have what seem to us very poor ships, they had very little knowledge of other lands. They were quite unconscious of the existence of warm, bright Africa, where the black men were living. They

had no idea that across the Atlantic Ocean were the two great land-masses of North and South America. They had never seen Indians. It would have been very surprising news to them that away to the east were the Chinese and Japanese, with their clear yellow skins and narrow black eyes.

But the fact that they had no knowledge of other countries was not enough to keep such lovers of the sea in the land of their birth. Sometimes when there had been angry words, or things went wrong, a Viking chief, stamping his great feet, took up his blade and got his men together. Then they went down to their ships and out to sea.

In the soft dark of night the chief took his position at the front of his ship, watching the stars. They were his friends and guides. Their light would take him away from troubled times. They would put him on the way to a new country.

One of these Viking chiefs went on and on to the west till the day came when it was time to let the ravens go. Land was near. In some such way as this, the discovery of Iceland was made. If you take a look at a map, you will see how near Iceland is to the great new land of America about which men had no knowledge then. Iceland is a sort of stepping-off place half-way across the Atlantic Ocean.

• There were Norsemen in Iceland for hundreds of years. There they kept cows and sheep, planting grass and drying it for food for their animals in the winter months. They did a trade in fish, oil, and skins. But for some of them this was not enough. Their blue eyes were ever looking out over the waters of the west for newer lands. Their hearts, never at rest and fearing nothing, kept saying, "Let us see what there is farther on."

Again and again the ships of wood with their snakes and dragons took their chance of destruction in the North Atlantic Ocean. At last they came across another great land. The Norseman who is said to have made this discovery was named Eric. He gave the new country the name of 'Greenland.' It seemed to him that such a pleasing name would have an attraction for men, and give them a desire to go there.

Eric had a son, Leif, who was a true Norseman. He was full of the love of danger and the desire for experience. One day, when his ship was sent out of its direction in bad weather, he had an idea that he saw signs of new land farther to the west. After that there was no peace for him till he was

able to go looking for this land.

Leif made a request to his father, Eric, to go with him on a journey of discovery. "Because," said Leif, "if you come, all will be well with us." But when Eric was going to the ship on horseback, his horse had a fall. He came off, and his foot was twisted. Eric took this as a sign that it was better for him not to go. So Leif, with about thirty-five men, went off on his journey without his father.

They went in a south-west direction. After some time they saw land. It was flat and covered with great stones near the sea, with great ice mountains not very far inland. It was probably Labrador. They took their vessels farther south

and again came to land. They were specially pleased to see the woods which came down to the. sea. Even the water on the grass in the early morning seemed good to them, and they said it had a sweet taste. This land may have been Nova Scotia.

They then came to another landing-place, probably in Massachusetts, where the Noreemen made a great house for themselves. They were greatly pleased with these new lands. How good it seemed to them to have such long days in the winter time! Where they had come from, winter days are very short. Here the grass kept green for such a number of months that there was no trouble in getting enough food for their cows. The rivers were full of fish, the salmon were "greater in size than any they had ever seen before." Best of all, possibly, were the grapes, which seemed to come up everywhere. Because of the grape-vines, with their highly-valued fruit.

The Norsemen got their ships full of dry grapes and wood from the evergreen trees. When spring came they made a start for Greenland. On the way Leif said to his men: "Do you not see

Leif gave the country the name of Vineland.

something strange away out on the sea?"

" No," was the answer.

But the great chief's sharp eyes saw farther than theirs. He had seen a ship in trouble. He went to its help, and got there in time to take off the fifteen men who were in it, with much of their property, before it went down.

 Leif and his band at last got back to Greenland. "There was now much talk" about his Vineland journey, so the story goes. But there seems to have been nothing more than talk, and talk quickly goes out of mind. How was it that all Europe did not get the news of these journeys of discovery till hundreds of years later?

• There are a number of reasons. Chief among them is the fact that there were no newspapers to make the story public, no newsboys to go running down the streets, crying "Special! Discovery of a new land!"

There were no radios to say, "This is station A B C D. Leif and his men have made the dis-

covery of a new land!"

News went only by word of mouth. After a time what was at first 'news' becomes only 'a story.' The songs and stories of Iceland are named 'Sagas.' For years they were handed down from father to son, and then for a long time they went from memory.

CHRISTOPHER COLUMBUS

The journeys of the Norsemen to the West took place hundreds of years back, and went from men's memories. Then another man with a desire to see strange lands, Marco Polo, went to the East; but his story is given in a separate book.* It was a very long and a very strange story. We will now go on to the journeys of Christopher Columbus and his discovery of America.

Christopher Columbus was an Italian. His birth took place about five hundred years back, in Genoa. This town is in the west of Italy, on the sides of a mountain sloping down to the sea. Great buildings and tall churches make it very beautiful.

Into the harbour of Genoa came trading ships with goods from different countries. Young Christopher, with the rest of the boys of the town, frequently went down to the harbour when a boat from other lands came in. They saw the sailors taking the goods off the ship. There were parcels with new strange smells. In them were 'spices' from the Far East, which were used in cooking to give food a better taste—seeds and roots, such as

'pepper' and 'nutmeg' and 'ginger.' There were small parcels of very great value. In these were 'rubies' full of red fire, and deep blue 'sapphires,' and other jewels of great price. How happy those boys would have been to be going on those ships! They frequently said to one another that when they were older they would go to sea.

Christopher Columbus went to school till he was about fourteen years old. He was given teaching in geography, Latin, and arithmetic, and he got some knowledge of the stars. His father was a wool-comber. He got the wool ready for the thread-makers by combing it out. It was his desire to give his son training in this trade. Christopher, however, had no thought but of the sea.

In those days a sailor's existence was much harder than it is to-day. Outlaws of the sea were ever watching and waiting to make attacks on ships and take their goods. Frequently there were violent fights, with the loss of a great number of men. Sometimes a ship was fired by the outlaws. But Columbus was not turned from his idea of being a sailor by any of these things. When he was about fourteen he came to the end of his schooldays and went to sea.

Columbus made a number of journeys in and about the Mediterranean Sea. Some of them were full of experiences of great danger. At one time his boat was in a fight with another ship and the two ships got on fire. Columbus kept himself from death by jumping into the sea and swimming to land. He made other journeys outside the

Mediterranean Sea. He went far north in the Atlantic Ocean and south to Africa.

After a number of years Columbus went to Portugal. The Portuguese were lovers of the sea. Only a small number of ships in those days went very far from Europe, but Portuguese ships had been part of the way down the west side of Africa. Such journeys were looked on as very unsafe undertakings. There were a number of reasons why this was so.

Men had very little knowledge of the earth. Only a small number had any idea of its size. The common belief was that the earth was flat. Men were unable to take in the idea that it was round. They did not go far away from land for fear of coming to the edge of the earth and falling off. In addition, they were in fear of the sea itself. They were still certain that there were dragons living in it, and that these great sea animals were strong enough to get a ship broken in two.

Another thing which was strange to most men was the compass. The 'needle' of the compass is a pointer which is turned by attraction to the North, so that it makes clear the direction in which a ship is going. Even some of those who saw it being used were in fear of it. They were certain that it was controlled by an unnatural power.

But Columbus had no belief in these foolish ideas. He was a great reader of books about journeys in far countries. He had given much attention to the best maps he was able to get, and he was expert at making good maps himself. It was his belief that the wise men of his time

were right when they said that the earth was round. He went through the *Travels of Marco Polo* over and over again. From this book he got much light on the Far East. The book was by this time over two hundred years old, but it was still the best of its sort.

Columbus saw that China was on the edge of a great sea. Portugal, the country in which he was then living, was on the edge of the Atlantic Ocean. The idea came to him that it might be the same sea touching the two countries. Marco Polo had go to the Far East by going east. Why would it not be possible to get to the same place by going the other way—that is, by sailing west?

At this time traders were very interested in getting a new way to the lands of spices and silks and jewels. The nation which made the discovery of another way to the Far East would become great and well-off. Columbus became fired by the desire to make that discovery.

Then came the question, where was the money to come from for such a journey? Columbus himself had no money. He put his design before the King of Portugal, requesting his help. The King gave some thought to the question, but at last he said no. Then Columbus went to the King and Queen of Spain. These rulers were at war with another country. They had no time to give any attention to theories about geography. He was sent to put his ideas before a group of wise men. The wise ones gave him a hearing. Most of them took the view that his design was quite foolish.

"What facts are you able to put forward in

support of your theory that the earth is round?" they said to Columbus.

"If the earth is round, your ship will be sailing up-ide down if you get to China, will it not?"

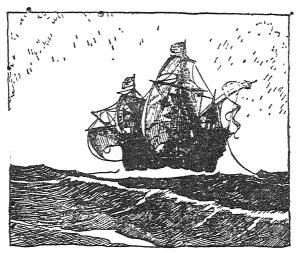
What an unbalanced idea it seemed to these men! They gave it as their opinion that it would be a waste of money to give him any help. His hopes became smaller and smaller. He was unable to get help from anyone. Men with much less knowledge than he had said that he was off his head. He was laughed at by persons in the street. Boys made sport of him. For a number of years Columbus made attempts to get help from other countries. His brother went to England for him, but he was unable to get the support of the English king. Then he went to France.

About this time Columbus came across a man of religion who was a friend of Queen Isabella of Spain. Here, at last, was someone who took an interest in what he was saying. While Columbus was talking, the man of religion became more and more certain that he was right. He sent for a shipbuilder of the town. The shipbuilder was equally interested in the story. He said that he

was ready to go with Columbus.

Then the man of religion sent a letter to Queen Isabella. He said that he had belief in Columbus. The Queen sent for the man of religion to come to see her. The good man went to the Queen without loss of time. He put forward the argument that here was a chance to make Spain great. He said that the amount of money necessary for the journey would not be so very much. He made a strong request that she would see Columbus.

The Queen said that she would do so. She sent the man of religion back with money to give Columbus, so that he might get the right sort of clothing in which to come before the King and Queen. Columbus came. He was a tall, strongleoking man. He had on his new clothing, and



The Santa Maria.

his grey hair was well brushed. He was pleasing in behaviour and in his way of talking. While he was making his idea clear his face got redder and redder.

At first it seemed as if Columbus was going to get 'no' for an answer again. He made a request to be given rule over all the land of which he might

make the discovery, and the King and his circle were of the opinion that this was desiring overmuch for himself. After a short time, however, they came to the decision to let Columbus have the money and ships. It is said that Columbus, was so moved that his eyes were wet when he put his name to the agreement.

Columbus was given three ships, the Santa Maria, the Pinta, and the Niña. Niña is the Spanish for 'baby.' It was the smallest of the three. Then the thing was to get sailors. It was hard to get anyone to go because of their fears. Men were even let out of prison to become sailors. Others were forced to go against their desires.

At last, early one morning in August 1492, before the sun was up, the three ships made a start. Those on land watching the ships go out to sea were crying openly. They were certain that

no one would ever come back again.

Out on the wide Atlantic, the sailors' fears became greater. There were such a number of things to put fear into them. There were the masses of sea-plants which their vessels kept running into. It seemed to them that they might get fixed in them and never be able to get their ships free again. There was an unchanging west wind which took them slowly farther and farther away from Spain.

"How will we ever get back?" they said to

Columbus.

Columbus said there was no reason for fear. They made a strong request to him to go back again. He gave no attention to them. The sailors' fears became worse. They said angry



They made a strong request to him to go back.

words among themselves. They got together and made a secret agreement to put folumbus over the side and take control of the ship themselves. Their design came to the knowledge of Columbus. He became hard and angry. Some of the men were put into chains. Columbus was not going to be turned from his purpose or be moved to fear.

On and on they went, day after day, for ten long weeks. Sometimes they seemed to see land in the distance. Sometimes strange birds gave them the idea that land was near. Again afid again their hopes were crushed. They had gone such a number of miles. It did not seem possible for land to be far away.

Columbus did everything in his power to keep his men happy. He made an offer of a new cort to the person who first saw land. The sailors kept a watch for the first sign of it. At last, one night in October, a light was seen in the distance moving up and down. Possibly someone was walking with it in his hand. Then through the dark a soft outline was seen against the sky. It was land, land at last!

There was little sleep for anyone the rest of that right. The minute daylight came they saw that a country with trees was not far from them. Columbus and some of his men got ready to go on land. Columbus put on a beautiful coat of soft, bright red material. His newly-polished blade was hanging at his side.

When the small boat came to the land, Columbus got out first, and with slow steps went up on to the sand, his sailors coming after. Then, on

the twelfth day of October 1492, he and his men went down on their knees to God for his loving care in guiding them safely through the long journey. After that Columbus said in a loud voice that the land was the property of Spain. He put up the bright red and gold Spanish flag, with two of the men waving the flags of King Ferdinand and Queen Isabella. The land, as they saw later was an island, to which Columbus gave the name of San Salvador.

While Columbus had been taking the new land in the name of Spain, dark-skinned men had been watching from a distance. At first these men had gone running away in fear to the cover of the woods. They had the idea that the Spanish ships were great sea animals. They were certain that the strange man had come down from the skies. Sowly they came nearer and nearer. At last they came quite near to Columbus. He gave them a smile, and they went down on their knees before him. Columbus made signs to them, questioning them as to where there was gold. The red men made answer by pointing in the direction of the south. That was in agreement with Columbus's ideas, because he had no doubt that he was in Asia, not far from China. He was certain that in a short time he would come across the great towns about which he had been reading in Marco Polo's book. Columbus gave up some days to sailing in and out among the islands looking forgold.

It is clear to us now that he was far from China, India, and the Far East. He was, in fact, very near to America, but there was no one to give him

the news that a great land-mass and a wide sea were between him and the 'East' he was looking, for.

From San Salvador Columbus went to Cuba. This time he was so certain that he had got to China that he sent a man with a letter to the Great Khan. But there was no great town, no ruler, to

be seen.

Then Columbus put his ships in the direction of Haiti. There his greatest boat, the Santa Maria, came to destruction. He then had only the little Niña, because the Pinta had made a start for Europe some time before. Columbus came to the decision that the best thing to do was to go back to Spain. Forty of his men did not go with him. They were to get a colony started on the island. Columbus took steps to make their position as safe as possible. The wood of the Santa Maria was used to put up a strong building for them, and they were given food and guns. Early in January they gave a last wave to the Niña and its men.

The journey back was a rough one. At one time it seemed to Columbus that they would certainly go down. For fear of this, he put down in writing the story of his journey and made a parcel of it with a bit of cloth. Then he put the parcel in a cake of wax. The cake of wax was placed in a vessel of wood and dropped into the sea. No one has any idea where it went.

At last, however, the little boat made a safe landing in Spain. It had been away six months. The news of its coming went quickly from tongue to tongue. Work was stopped, and everybody

went running out to see if the story was true. It certainly was! This man who had such foolish ideas about the earth being round was back again. He had with him strange birds, strange plants, and, strangest of all, painted red men. It seemed that this Columbus was truly a great man after

The King and Queen sent for Columbus. They were greatly interested in his story. They had a look at all the things he had with him. gave attention while he made clear to them the way he had gone, and how he had come to the east part of Asia. He said that because that part, of the earth was named the Indies he had given the red men the name of 'Indians.' That is the name which has been kept to this day.

Ferdinand and Isabella were very pleased with Columbus and his discovery. He was made an 'Admiral'—one of the highest positions in the sea-force. Now, when Columbus went out into the streets, men gave loud cries of approval, and came round him in great numbers. It was not hard to get men and money to go on a second

iournev.

When Columbus got to Haiti the second time, not one of his forty men was living. There was very little of the building in existence. had been a great fight with the Indians, and every white man had been put to death. Columbus had to get a new colony started.

-On his third journey to the new land Columbus got to the north part of South America. While he was away those who were against him said bad things about Columbus to the King. They said

that he was cruel. They said that he had no idea of ruling a colony wisely. The King was turned against Columbus by these stories. He sent out another man to take over the government of the colony, with orders to send Columbus back to Spain in chains. Columbus's heart was almost broken by this blow. He made a strong protest against being shamed in this way without a chance to give his side of the story. The King and Queen gave him a hearing, and he was made a free man again. They let him have money and ships for a fourth journey.

On this, his last journey, Columbus got to Honduras in Central America. But he came across little gold and no jewels. It seemed that he had still not made the discovery of the much desired way to the Indies. The death of his good friend Queen Isabella took place while he was away. Columbus came back ill, tired, and poor. He went on living a little more than a year longer. Then he came to his end, an unhappy old man.

To the last, Columbus was unconscious that the had made the discovery of a new part of the earth. He was never comforted by the knowledge that he had made a road across the Atlantic Ocean to America. He had no idea that year after year others would go the way whose dangers he had been the first to overcome, or that millions of persons would some day come from Europe to make their living in the wide lands of America.

VASCO DA GAMA

It was Columbus's belief that he had made the discovery of a new way of getting to Asia. Columbus had been sent out by Spain, but Spain was not the only country desiring a new way to the East. A number of other countries were deeply interested in the discovery of another way to India. From India came the spices so greatly desired by Europe. These substances, papper, nutmeg, ginger, and so on, were much used in cooking. There were no ice-boxes in those days to keep things from going bad. Meat which had been kept for some time did not have a very good taste by itself. But by putting spices with it this taste was overcome. The old way to India had become unsafe because of the Turks and others who made attacks on Christian traders. The man who made the discovery of a way to the country of peppers and nutmegs would make much money and a great name for himself.

To the west of Špain is the country of Portugal. If you take a look at your map, you will see that this country has water on two sides. The Portuguese are good sailors and have a natural love for the sea. Portugal's kings sent ship after ship down the west side of Africa. Most of them came back when they got to the point farthest south,

because of the rough seas which sent a boat up and down like a leaf in the wind.

One King, however, was certain that it was possible to get to India by sailing south and round Africa to the east. He made ready three



He made ready three good ships.

good ships for a journey of discovery. He took care that every ship had twice the normal number of sails, and that the cords were new and strong. He gave them enough guns. He sent about for black servants who had a knowledge of the language of the East. They were forced to go on

the journey so that they might make clear to the Europeans what was being said by those they came across in those far-off lands.

Vasco da Gama was put at the head of this undertaking. When all was ready for sailing, the King and Queen and those of their circle, together with da Gama and his men, all went to church. After that the King and Queen and the rest, forming a train, went slowly down the streets to the harbour. Men of religion went in front, with tall wax lights in their hand, lifting their voices in song. While the three ships were moving out to sea, the good men were sending up requests to God for His care and help.

The journey south down the west of Africa was a very rough one. Parts of the ships were damaged. The sails were pulled away from their supports. The ships were starting to let in water. The sailors had had enough of it. Tired and unhappy, they came to their chief, desiring him on their knees to go back again. But da Gama, like Columbus, said no. He said that they were going to keep on. Day after day they went on fighting the waves, till at last they got round the south point of Africa. They were so happy that they gave the point of land the name of 'Cape of Good Hope.'

After that the weather got better for a time. The men became happier. It was not long before they were sailing in the Indian Ocean. But now more bad weather came, even worse than before. The waves were so high that the boats were frequently unable to see one another. But still da Gama went on. For a long year the three ships

made their way in the direction of the East. Sometimes they had to go in to land for food, or to put right damage to the ships. At last they came to India. This was the first time any

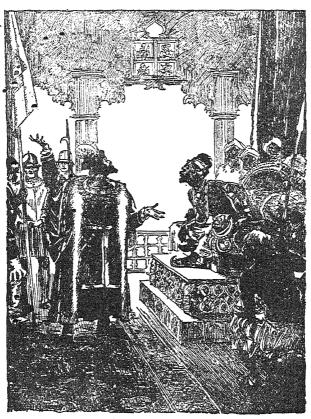
European had got to India by sea.

At Calicut, they were given a hearing by the King. He had a jewelled band on one arm. Threaded jewels, the size of nots, were round his neck. He had long black hair which was fixed on the top of his head in a knot. Round the knot were some more jewels, and in his ears were great gold rings. By his side was a boy servant with the great 'shield' for covering the body of the King in war. It was red, with a band of jewels round the edge. A man of religion was at the other side of the King. He gave the King a leaf to put in his mouth. This made his teeth and mouth red.

Da Gama gave the King a letter requesting the royal ruler to let Portugal have trade with his country. The King was ready to do this. He said that da Gama might take onto his ships any goods desired, and that the men might come on land for some amusement. How pleased the sailors were! At last they were in India, the land of jewels and spices.

When da Gama was ready to go back to Portugal, his ships were full of beautiful things from the East. It took three days to put everything on the ships. In addition to the spices, there were jewels of great value and beautiful silks. There were clean water and fruit for the journey back. There were birds to be cooked for the table, and

rice enough for everyone.



They were given a hearing by the King.

Once again da Gama and his men went through long, slow days of seeing nothing but water. When at last they got to Portugal they had been

away more than two years.

The King, the Queen, and hundreds of other persons were down at the harbour waving to the ships when they came in. There was an outburst of pleasure when the news was made public that at last the discovery had been made of a way to India by sea. But there were some sad hearts among those who had been waiting for their loved ones. A number of the men had not come book. Hard work, poor food, and disease had taken off.

Before the sailors were let go, they were well rewarded. In addition to getting good payment for his work, every man was given a part of the goods. They were able to take beautiful things to their families and friends. Da Gama got enough money for his things to make payment for the journey over and over again. Marks of royal approval were rained on him. He was given one of the highest positions in the sea-force. When, later, he went back to India, he was made ruler of the Portuguese colonies there.

The discovery of a new way to India had a great effect on the business of Europe. From that time the European countries went to India by way of the Cape of Good Hope and the Indian Ocean. That was the way used by them for almost four hundred years, till the Suez Canal was made. This makes the distance much shorter, by cutting out the long journey round Africa.

HOW AMERICA WAS NAMED

WE have seen how Columbus went sailing to the West looking for a new way to the Far East, and howela Gama made the discovery of a new way to India by going round South Africa. All this time other journeys of discovery were being made. Some of the most important ones were those of an Italian named Vespucius.

Vespucius was like Columbus in a number of ways. His birth-place, like that of Columbus, was Italy. He had the same love for the sea. He was interested in learning about the stars. He was able to make maps. And, like Columbus, he made a number of journeys to America. Four of these journeys he made for Spain, and two for Portugal.

Much of our knowledge of Vespucius comes from a long and interesting letter which he sent to a friend. In that letter he gave the story of his first four journeys. He gave an account of a small Indian town he had seen. This town was out in the water. It was joined to the land by bridges. When the Indians saw anyone coming against them, they made their town an island by pulling in the bridges, and so kept themselves safe.

Vespucius gave an account of existence in some small Indian towns where not only animals, but

men, were used as food. The Indians were greatly surprised at hearing that the white men did not make meals of one another. They said to Vespucius that such meat had a very good taste. One Indian was very pleased with himself because in his time he had got through three hundred men.



He was able to make maps.

The letter has accounts of beautiful birds with bright feathers; of great trees and small plants. It was the belief of the Indians that if a person took some of these small plants for food he would go on living for a hundred years or more.

On one of his early journeys Vespucius went to what is now named South America. He had no idea, however, of what land he had got to. He went down the side of Brazil for some distance.

After a time he came to a place as far south as the Cape of Good Hope. But Vespucius was thousands of miles west of that Cape. He was sailing down

a land which was new to European sailors.

Nespucius had no doubt that he had made the discovery of a new land, to which no European had ever been before. Europeans had a knowledge of Europe and Asia and Africa. But here was land away to the south which was certainly new to everybody. It seemed to him like a new earth, and he gave it the name of 'the New World.' His account of this New World was made into a little book. In a very short time a number of persons were hearing about it, and desiring to have a copy. The outcome of this was that Vespucius' - book came to be printed in Latin, in French, and in German.

It was not long before this new part of the earth was being put on maps. It was a German mapmaker who gave it its present name. You may be surprised that it was not given the name of the man who had first made the discovery of it, Columbus. It was, however, named America, after Vespucius, whose first name was Americus. No one had any idea that Columbus and Vespucius had got to different parts of the same great land-mass. At first this name was used only of Later, it became clear that South America. 'America' was only the south part, and the

names 'North America' and 'South America' came to be used.

MAGELLAN

WHILE Columbus and da Gama and Vespucius were making their great journeys, a young boy in Portugal was becoming a man. The name of this boy was Ferdinand Magellan, and he was one of the King's circle. He was not of royal blood, but he came from an old family of high position. Much talk about sailing to the East and about journeys to the New World went on in the boy's hearing. When he got older, he was full of the desire to go to some of these strange new places. Joining the Portuguese army, he went with it to Africa. At another time he made the long journey to India round the Cape of Good Hope.

It had seemed to Columbus that in sailing to the West he had got to India. Magellan had the idea that west of the Atlantic and the New World of Columbus and Vespucius there was another sea. He had hopes that there might be a waterway somewhere across this New World. If there was, he would be able to take a ship through from the Atlantic Ocean to the other sea, and go on across it. In this way, by sailing to the West, he

would, it seemed to him, get to India.

Magellan put his ideas before the King of Portugal. It is not clear what had taken place,

but the King, who had had Ferdinand about him from the time he was a little boy, was no longer his friend. He would not give Magellan any help. Magellan then put the question, Would the King let him get help from some other ruler? The King said that Magellan might do whatever he

had a mind to.

So Magellan, like Columbus, went to the King of Spain. The boy King of Spain was pleased with Magellan. He gave him food and five ships for his journey. Stores for two years were put in the ships. Bells and glass ornaments to be used for trading were stored away. But unhappily the ships were poor things. They were old, full of worm-holes, and unsafe. The sailors came from a number of different countries. Some of them were ready to make trouble. Happily for Magellan there were among them some Portuguese by whom he was greatly loved.

They made a start in September 1519. At first they were kept back. The sea was so quiet that there was not enough wind for their sails. Later, they were overtaken by very rough

weather.

After a time they got to Brazil. Then came the business of looking for the waterway which Magellan was hoping went from sea to sea. They first went south, testing every inlet which seemed to go in the desired direction. But one after another these inlets came to nothing.

The weather got colder and colder. The store of food was getting less. It seemed best to go on land with their bright glass ornaments for the purpose of trading with the Indians. But in exchange they got little good food. The men were overcome by fear and became worked up against Magellan. They came to a decision to make him a prisoner and take control of the ships. Then they would go back to Spain. The man who was responsible for this idea got a number of the sailors on his side. He gave them food and wine, and said that there would be more for them when they had overcome Magellan.

But Magellan got knowledge of their design. With those who were true to him, he made an attack on the others. There was a violent fight. A knife was pushed into the throat of one. Another's head was cut off. A third was put in chains. In this way the outburst was put down.

At last spring came and the ships took up their journey to the South. Again they went looking for the waterway which would make it possible for them to get to India from the West. But again rough weather put them in fear of destruction.

At last, far south, they came to an inlet. High mountains went up on the two sides. There were islands in the way which made sailing hard. For more than a month they went on, fighting their way in and out of the twists and turns, round and about the islands. At last they saw a great sea stretching out before them. Everyone was very happy. Magellan was so moved that his eyes became wet with pleasure.

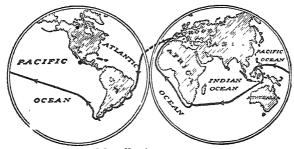
The sea seemed full of peace with its smiling waters moving softly up and down in the bright light of day. Magellan gave it the name of the 'Pacific Ocean'—from the Latin word for 'full

of peace.' The waterway was named the Straits of Magellan, after the man who had gone through such dangers to make the discovery of it.

"Now," said some of the men, "we have done

what we came to do. Let us go back."

But Magellan said no. He said that they would go on, whatever they had to put up with. Even he, however, had no knowledge of the great distance still to be covered. He had no idea that the Pacific Ocean was twice as wide as the Atlantic.



Magellan's journey.

For a time they kept near the west of South America. Whenever it was possible, they went in to land for food. In a short time their ships were turned to the West. Month after month they saw only the wide stretch of the great Pacific Ocean. After a time their drinking water became yellow and dirty. Their food was gone. The men were almost off their heads with pain and need. A rat seemed like the most delicate meat. They even got their teeth into bits of leather from old shoes. One man after another, stretching

himself out on the hard boards, came to his end from need of food.

At last some islands were seen in the distance. Oranges and other fruits were hanging on the trees. With what pleasure the men at last prt food into their stomachs! In addition to the fruit there were green plants and meat, which made them all stronger again!

Ten days later they got to the Philippine Islands. It was here that Magellan came to his death. There was a violent fight with some of the black men. The Europeans were getting the worst of it, and it seemed best to go back to their boats. Magellan undertook to keep back the blacks while his sailors got to their ships safely.

Magellan had on the metal fighting-dress of his day—a metal plate over his body and legs, and a thick metal head-covering. But in the fight this head-covering came off. Here was the chancethe black men were looking for. They came iumping at the white man, driving their long, pointed 'spears' through his body. Crushed to earth, with blows raining on him from every

side, the great sailor came to his end.

One of Magellan's chief men took control. Only one of the five ships which had come from Spain went on to the end of the journey. Of the other four, one was sent up onto the land by the force of the waves and crushed to bits, one went back to Spain, one was given up at the Philippine * Islands, and one went down at sea. It was a foor, damaged, broken thing, that fifth ship which at last came back into the harbour after being away from Spain for three years. Only a very small

number of the sailors had come through the shocking experiences of the long journey. These were thin and feeble-looking men.

But a most important thing had been done. It had been made clear that this earth of ours is



Driving their long, pointed spears through his body.

round; that there is no edge to go falling off. Men had been made conscious that it is truly a great wide earth, far greater than anyone had had any idea of before. Magellan and his men had taken away all doubt that by sailing to the West one may get to the Far East.

JAMES COOK

COLUMBUS, Vasco da Gama, and Magellan all made their great discoveries more than four hundred years back. These men, facing danger and death without fear, gave the new land of America to Europe. But there were still other places on the earth of which Europeans had little or no knowledge. The south part of the Pacific Ocean was one of these places. It was named the South Seas.

There were all sorts of stories about the South Seas. One of them was that somewhere in the wide stretches of the South Pacific there was a great island. A number of persons had made attempts at the discovery of this land, which is now named Australia. At last, between 1700 and 1800, an Englishman, James Cook, got to Australia and New Zealand. It was he who gave us the first true account of this part of the earth.

On his way from England, 'Captain' Cook made landings on a number of small islands of the Pacific. At last he got to the north part of New Zealand. The New Zealanders were not at all pleased to see the new-comers. A group of them came running out of the woods with their long, sharp-pointed spears lifted, ready to make an attack on the sailors. To get away safely they

had to let off their guns and put one of the black men to death.

They went sailing in and out of the inlets. number of places still have the names which were given them by Cook and his men on this journey. In sailing round they made the discovery that New Zealand was in fact two great islands.

After that, they went west to Australia, going some distance round it. To one inlet where they went on land they gave the name of 'Botany Bay,' because of its great number of flowers and flowering trees. The Australians they saw were very dirty. It seemed strange among all the beautiful flowers to come across such dirty men and women. They were so dirty that it was almost impossible to say what their natural colour was. Some of the men made an attempt to see, by rubbing the Australians with a wet finger, but the coating was so thick that they were not able to get through it.

Among the animals of Australia, there was one in which everybody was specially interested. The sailors were never tired of watching it running. How quickly it went! Its feet were like a goat's, but its back legs were much longer than its front ones, and it was able to make great jumps through the air. It had a long tail, and was the size of a good-sized dog. The Australians said it was a kangaroo, and that is the name we give it to-day.

After sailing about for some time, Cook again went on land. This time he went through the form of taking all Australia under the British flag. He gave it the name of New South Wales because the land seemed to him like Wales, a part

of the British Isles.

Not long after this the ship was badly damaged. It was sent by rough seas onto one of the stretches of sharp-pointed stone which are common under the water near Australia. A great hole was made in the side. For hours the men were working to keep their ship from destruction. When at last it was safe, Cook saw that they would have to make a start for England.

Captain Cook made a second journey. He went again to the South Seas. This time he went



A kangaroo.

farther south in the Pacific Ocean. Frequently the ships were in danger of being smashed by moving ice. Once they were almost crushed by a great mass of it, though it was summer in those waters. Sometimes it was so cold that the faces of the men were coated with ice. A thick mist frequently made it impossible for Cook's two ships to see one another. At one time the mist was specially thick. Cook was unable to see anything of his other ship, and he was forced to go on without it. It was never seen again.

When the summer had gone, Captain Cook took

his ship north and west. He went round a great number of the islands of the Pacific Ocean. When the story of these beautiful and fertile lands got to England, English traders became very interested. This seemed to them a good chance for trading.

* Cook and his men made frequent landings on the islands. Sometimes they were in need of clean water, and frequently they went for green food. Captain Cook took great care to keep his men

healthy.

Fruit and green food were got by trading with the black men. They were not all ready to take the same things in exchange. Some of them had no use for bells or glass ornaments. They were more interested in instruments for cutting down trees, and in nails. Frequently they had a great desire for red feathers.

Sometimes the fathers came for things to give to their families. One little boy was given a white shirt. There was no one in the land who was happier than that small boy. But his pleasure was short. An old goat, going about, sent him rolling in the dust. When he got up his beautiful shirt was all dirty. The poor little boy was overcome, crying as if his heart was broken. A kind sailor got the shirt washed clean for him and he was happy again.

After this, his second journey to the South Seas, Cook again went back to England. He had done two very important things. He had put it out of all doubt that Australia and New Zealand, were the only great lands in the South Pacific Ocean. In addition, he had made men see that

pain and disease were not the necessary price of a long sea journey. Cook had been at sea almost three years. He had been far enough to have gone round the earth three times. And there had

been only one death among all his men.

How different this story is from that of the sad end of Magellan's men. But Cook's third journey was in some ways very like that of the great Portuguese who made it clear that the earth is round. On this journey Cook went down the west side of North America. He went through Behring Strait into the cold waters of the Arcic Ocean. After a time there was nothing in view but fields of ice. In every direction that was the only thing to be seen.

Then Cook took his ship south. After sailing for a number of days, land came into view. It was a group of islands. These islands were named by Cook the 'Sandwich Islands.' To-day they are given the name used by those living in them,

Hawaii,' or the 'Hawaiian Islands.'

The men on these islands had never seen white men before. When Cook and his sailors went on land, the blacks went down flat on their faces before them. Then they came to them with offerings of little pigs. The chief gave a very long talk, but the white men had no idea what he was saying.

At first the Hawaiians were very kind, but it was not long before there was trouble. When men have no knowledge of one another's language, they frequently get wrong ideas into their heads. An error of this sort was the cause of a fight between the Englishmen and the Hawaiians.

Cook, like Magellan, made an attempt to keep back the blacks while his men got to their boats. The Englishman, his gun in his hand, put himself between the boats and the oncoming Hawaiians, crying to his men to be quick A black man came



A black came softly up at the back of hims

softly up at the back of him and gave him a crushing blow with a thick stick, forcing him to his knees. Then the man sent his short blade into Cook's back.

The men sadly put the body of their chief into their boat and took it back to England. Once again a great sailor had gone to his death for his men.

LIVINGSTONE AND STANLEY

THE discovery of America by Columbus took place in 1492, and other great journeys of discovery those of Vespucius, Magellan, da Gama, and a number of others—came quickly after. And in all the hundreds of years from that time to the present, men have been making their way into lands never before seen by Europeans. So great is this earth on which we are living that even now parts of it are still unmapped.

It was about one hundred and fifty years back that Captain Cook went to the South Seas. went to New Zealand and Australia and to a number of the islands of the Pacific. But even he did not get to the end of the great work of discovery. There were still great stretches of the earth which no European had ever gone through, for example, the great land of Africa. It is only in the last fifty years that we have had much knowledge of the middle part of that country.

There are a number of reasons why this is so. Africa has only a small number of natural harbours. One has to go a long way before coming across a good landing-place. On the west side there are low, wet lands which are very hard to get through. And even if this is done safely, there are then high mountains to go across.

In the middle of the country it is very warm and wet. The land is covered with thick undergrowth. Animals such as lions and leopards, the great cats with black and yellow coats, go looking for food through the tall grass. Black men, violent and cruel, make attacks with poisoned spears. To the north is the great Sahara Desert — miles and miles of sand which seems to have no end. When the wind is blowing, the sand comes up in clouds, getting into men's noses and eyes,

and paining the skin like sharp needles.

Frequently one has to go for long stretches without a drink. Only in the green places named 'oases,' which are at great distances from one another, is there any water. Journeying through the wastes of sand is slow work. The camel is the animal which is most generally used for this purpose. He is able to go without water for days. He seems to be untroubled by the burning sun overhead and the burning sand under foot. Long trains of these animals go slowly across the wastes of sand to and from the sea. They have great parcels on their backs. In them are things for the markets of Europe—smooth, bone-like, white 'ivory,' so beautiful for cutting delicate designs on, gold, and jewels. These trains of trading camels and their keepers are named a caravan.'

These are some of the reasons why for so long Europeans had very little knowledge of Africa. They gave it the name of 'the Dark Continent.'

But the dangers of Africa, its great stretches of unhealthy country, its violent animals and cruel blacks, were unable to keep some men from (4,539)

attempting to make their way into it. Like Columbus and the rest they were ready to go to their deaths in a great undertaking. One of these

men was David Livingstone.

Not much has come down to us about the young days of the men who made the first great journeys of discovery. This is because they were living in times when the writing of books was a very uncommon thing. Hundreds of years back book-making was very dear, and only a small number of persons had a knowledge of reading. With Livingstone, however, we are getting near to the present. Most persons by this time have a knowledge of reading and writing. Books are cheaper. The stories of great men are printed, so that others may get pleasure from reading about them. And so we have some knowledge of David Livingstone as a little boy.

David Livingstone's birth took place in Scotland. When he was only ten years old he was put into a cotton works. Work was started at six in the morning and went on till eight at night. One of the things David had to do in the works was to take great parcels from one floor to another. The boy had a bright idea as to how he might be learning something while he was taking his parcels about. He put an open Latin book on a shelf. When he went by, he took a look at one statement in the book and kept saying it over to himself on his way from place to place. When he had got, that one by heart, he took a look at another. For nine years David went on in the works in this

way, learning while he was working.

There was night school from nine to ten.

David was able to go to it. When he got back he was frequently working at his books till late into the night. Sometimes his mother came and took away the wax-light so that he would have to go to bed.

David's chief desire was to become a 'missionary,' one who went to other lands to take the teachings of Christ to the men and women there, and to give them help in becoming better. An older missionary gave Livingstone an account of Africa. He said, "I have seen the smoke from a thousand small towns going up into the air. No teacher has ever been to them. That is the

place to go to."

Livingstone came to the decision that Africa was the land where he would go to do his work. He made a start at Cape Town in South Africa, working his way north. He went into parts of Africa where no white man had ever been. Sometimes on his journeys it went on raining and raining day after day. The earth became soft. One went down in it up to one's knees. Frequently there were miles of dirty black water. After the rain, warm mists like steam came up from the water. Breathing was a pain. There were no dry places for sleep. It was hard to get any wood dry enough to make a fire for cooking.

In addition to these dangers, there were violent animals, snakes whose bite was death, insects which made poisoned wounds. And there was ever the fear of disease. A number of times Livingstone was so ill that it was days before he

was able to go on.

Livingstone made the discovery that a number

of the Africans were naturally kind and good. He gave them teaching in the Christian religion. Because he was a medical man he was frequently able to make them better when they were ill. In a short time they saw that he was a true frience to them, and they came to have a great love and respect for him.

One thing specially made Livingstone very sad. Wherever he went, he saw black men and women, even little boys and girls, made prisoners and taken off like animals to become the property of planters in America. All sorts of cruel things were done to them. Frequently they were whipped when they did not go quickly enough to the ship which was taking them away from their country and families. On the ship they were put all together in such a narrow space, with so little air, that a number of them were dead by the end of the journey.

To Livingstone this was all wrong. At one time when he came to England he gave talks wherever he went against this cruel trade. He did much to make the English see that it was time to put a stop to this trading in men and

women.

On his third journey to Africa, Livingstone went straight into the heart of that country. This time it was his hope to get to the start of the river Nile. For a number of years there was no news from him. Then it was said that Livingstone was dead. This story was printed in a London newspaper:

"Livingstone went through a small town. Two or three days later the king of that town came to his end. The black men got it into their heads that Livingstone had made use of some urmatural power against him. They went after Livingstone, made him a prisoner, and put him to death. This news comes through a Portuguese trader journeying that way."

But there was an American newspaper which had no belief in the story of Livingstone's death. This paper was the New York Herald. The owner of the Herald came to the decision that the only thing to do was to make an attempt to get to Livingstone. He sent for one of his best newspaper men and said to him that he was to go to Africa and make his way to Livingstone.

The man to whom the newspaper gave this hard bit of work was Henry Stanley. Stanley was an Englishman by birth who was then living and working in America. He has put his experiences into a book, and in this book he gives the story

of his early years.

'Stanley' was not his name when he was a little boy. He was named John Rowlands then. His mother and father were very poor. After the death of his father, his mother had to put him in a house for boys without fathers. There he, like the others, was cruelly whipped. As a punishment for a small error in their school work, the boys were given a whipping which made the blood come. Sometimes the teacher gave a boy a blow which sent him down on the stone floor. In the winter time the boys were sent outside to do work. Their clothing was so thin that they were unable to keep from shaking in the biting

cold. It is not surprising that the boy took his chance and got away from the place when no one

was looking.

John Rowlands got safely to some of his relations, but it quickly became clear to him that they were not very pleased to see him. After living with one for a time he went to another. But though the boy was hard-working, no one was very ready to keep him. Every time it was John's hope that he was going to someone by whom he would be loved. His heart was full of the desire for a family circle such as other boys had. Sadly he went from place to place. Nowhere was there any room for him.

At last John went to sea. His ship was going to America. Existence on that sailing-vessel was full of pain and fear. He saw sailors given blows on the head with iron rods. He saw others kicked and hammered till they were covered with blood. At last the boat got to New Orleans. The boy had come to the decision that he was not

going back on it.

The ship was at the landing-stage. Night came down. Helped by the dark, young John took the two or three things which were dear to him and went softly from the ship. In the black shade of great parcels of cotton he made himself a safe resting-place. There he kept quiet till daylight came.

In the bright sunlight of the morning John went up the business street. He had to get work. He took a look first to the right and then to the left. Everything was interesting to him. He was pleased by this hard-working bright new America

In front of a store he saw a man reading a newspaper. The boy went up to the strange man and said, "Are you in need of a boy, sir?" John had no idea then that he had said the best possible thing.

The man certainly was "in need of a boy."

He had no sons or daughters, and had long had.

a desire for a son.

Mr. Stanley—that was the man's name—took a look at John. He saw a strong, healthy boy before him. The boy gave answers to all his questions simply and openly. At the end of their talk he was given work at five dollars a week.

At Mr. Stanley's request, John went to see him at his house. They became great friends. After the death of Mrs. Stanley, the man sent for young John. He made the boy an offer of a place in his house and in his heart. Then he said to the young man that it had been his great desire to have a son. John was to be his son now. He was to take Mr. Stanley's name, living in Mr. Stanley's house and taking part in everything with him. Very seriously they came to this agreement. John Rowlands was at an end. Henry Stanley had taken his place. It was the start of a new existence.

It certainly was a new existence. For the first time Henry Stanley made use of a tooth-brush. He was surprised at learning that it was a common thing to have a bath every day. He had had no idea that it was possible for underclothing to be so smooth and clean. But these things were only the start of his new father's teaching. Together they went through all sorts of books. Together they went to different parts of the United States.

This wise and kind man made this boy without family or friends truly happy at last.

After a number of happy years together, came Mr Stanley's death. Henry Stanley was again by himself. When Stanley's paper said he was to go and have a look for Livingstone, he was ready.

Stanley got to Africa and made a start on his long journey. He took with him two white men some black guides, animals for the transport of their goods, and glass balls and small ornaments to give to the Africans on their way. They had little idea where they might come across Livingstone.

Again and again they put questions about the white missionary. They got a number of different answers. Some said that he was dead. Others said that he was somewhere in the waste, where it would be impossible to get to him. There was nothing to do but go on. The journey got harder every day. Some of the animals came to their end. Frequently the little band was in need of food. Stanley, like Livingstone, became ill.

At last a story came to their ears which gave them new hope. Two or three hundred miles away there was a white man. He was no longer young. His hair was white. He had on clothing like Stanley's. This might be Livingstone. On they went. Some days later they again had news of a white man who was living not very far away.

After a time they came to a beautiful, wide stretch of water, smooth as glass. Small broats were going across it. There was a small town on the edge. It seemed that they might at last be going to see the man they were looking for. The little band was greatly moved. Then

they saw a tall man with white hair coming up to them Almost without breathing they kept their eyes fixed on him, waiting. Was it possible that this was Livingstone?



"Dr. Livingstone, is it not?"

Stanley went forward. He took off his hat and made a motion of respect. Then he said, "Dr. Livingstone, is it not?"

The man gave a smile and said, "Yes." Then. Stanley said, "God has been good to let me see

you."

Livingstone made answer, "I am very happy that I am here to have this meeting with you."

Stanley had got to his man!

Livingstone, however, was very ill. The under



The blacks took his body.

sides of his feet were covered with open wourds. First the disease made its way through the soft part, and at last it got down to the bone. But even to keep himself from death Livingstone was not ready to go back. Stanley was unable to get

him to come away from Africa or the blacks for whom he had been working. And so the day of

parting came.

Livingstone was in Africa for another year. He came to his end there, cared for and loved by his black friends. They took his body all the long, hard miles down to the sea. Then it was sent to England. A black man went with it all the way.

Livingstone was put to rest in Westminster Abbey. This is the greatest sign of respect it is possible for England to give. Livingstone's body

is in the last resting-place of Kings.

Stanley went back to Africa after giving his story to his newspaper. This time he was to make a journey of discovery up the great Congo River which goes through the heart of Africa, a rough country full of dangers. Again, most of the journey was a hard fight against heat, disease, and black men. At one time Stanley and his band were forced to go without food for three days and two nights. At another they saw one of their number cut up into bits by an angry black man. But the blacks were not all against them, and some of them were very kind. They frequently became friends of the white men and were pleased to be their guides.

Stanley made the discovery that Africa was a country full of things of much value. There were great trees in the low land near the Congo. He saw that they would be of much use for buildings. There was rubber to be had at almost every turn of the river. Stanley and Livingstone together had made it clear to all that Africa is not 'dark.'

It is a land with a great future.

PEARY

Long before the days of Columbus, sailors had been sailing their ships far north, even across the Arctic Circle. They had been looking for a shorter way to the gold and jewels of India than the ong journey round Africa. The 'North-west Passage was the name they gave to this hoped-for waterway. The attempt to make this discovery was responsible for a great number of deaths. Vessels went down, or were smashed to bits. Sailors, if they got to land, were overcome by the need of food or the great cold, falling dead in the act of walking. But every two or three years another band of men made a start all over again. At last they came across a north-west waterway. But it was of no great value after all, because the journey was so hard.

But the sailors with a taste for discovery were now pushed on by another desire. This was to get all the way to the North Pole, the point on the earth which is farthest north. The North Pole is a place where there is daylight for almost half the year. The rest of the year it is dark all

the time.

It was not till after 1900 that men at last got to the North Pole. Robert Peary made it his great purpose to get there if possible. Other men had made the attempt before him. They had gone to their deaths—some from cold, some from need of food. Peary had a knowledge of all this, but he was full of the desire to be the first to put

up his country's flag at the Pole.

It is not enough to make a decision to go on journeys of discovery. One has to do more than that. Years of hard work are necessary, learning everything possible about such an undertaking. One has to keep oneself well and strong. Details have to be worked out, and worked out over again. One has to have an idea what the weather will be like at different times, and be ready for it. One has to have a good knowledge of the geography of the land and the general direction of the winds. One has to be ready to put up with the hardest conditions. Most of all, one has to be good at facing danger.

All these things are necessary; but, in addition, no journey of discovery is possible without money. Columbus went to Kings and Queens for money to make his journeys. Peary gave talks to get money, requesting help from anyone who was ready to give. He got some help from men who were well-off; and sometimes others who hadn't much money sent him as little as a dollar. He was pleased to get any amount, great or small.

Peary made a number of attempts to get to the

North Pole, and in 1909 he at last did so.

Before undertaking the journey to the Pole, Peary went twice to Greenland, the country of which the Vikings had made the discovery such a long time before. On the first journey the ship was going slowly through the great fields of ice near Greenland. A cake of ice got onto the guiding-apparatus. This sent the ship's wheel twisting quickly round, and Peary's leg got fixed in it. To get his leg out some of the bones had to be broken. To those who were with him it seemed best for Peary to go back to New York, but they were unable to get him to do so. He said that a number of persons had given money for this journey, and he was not going to let their money be wasted. So the work went on. Peary's leg got better so quickly that only a short time after he was first in a competition on snowshoes!

On the second journey, Peary made the discovery that Greenland is a great island. This fact was a help to him in mapping out his journey

to the North Pole.

Peary made a start on his last attempt to get to the Pole in July 1908. The little group went from New York on the steamship Roosevelt, named after President Theodore Roosevelt. The whistles of all the steamboats in the harbour and the works round about were sounded. The harbour front was black with men and women waying to the ship, and hoping that all would go well.

The day on which the Roosevelt went away was one of the warmest New York had had for a long time. But the men on the Roosevelt were going to a place where it was sometimes as cold as sixty degrees lower than the point at which water

becomes ice.

In a short time the land was a great distance away. The *Roosevelt* was going farther and farther north, in the direction of Greenland. There was hard work waiting for that strong ship.

Even in the summer time the water north of Greenland is full of ice. Sometimes the masses of ice are as much as a hundred feet thick. In moving they make a low, deep, angry noise. Their edges seem sharp enough to get a ship cut in two.



Peary had made friends of the Eskimos.

There is all the time the chance of being crushed by these great, white mountains. Sometimes Peary made use of dynamite for forcing a way through the ice.

The man in control of the *Roosevelt* had been with Peary on other journeys. His ship and he were old friends, and he was certain of what it would do. He said things to the *Roosevelt* as if

it was a living being. While the boat was cutting its way through the great masses of ice, he had a way of crying out "Go through them, Teddy! Give them a bite! Get them cut in two! Go on!

That's beautiful, my boy!"

In Greenland, Peary got the last details of his journey to the Pole worked out. He took on the ship, in addition to his little band, a great number of Eskimos and their families. These men of the North have a good knowledge of their country. They are strong. They are able to put up with the great cold. And they are good workers for anyone who is kind to them.

Peary had made friends of a number of the Eskimos on other journeys to Greenland. They were conscious that if they were hard-working they would be rewarded. They would be given good wood for their snow-carts, or 'sledges.' Guns and firing-material would be theirs, wood-

cutting instruments, knives, and matches.

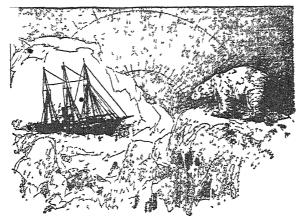
On the Roosevelt, the women got skins stitched together to make clothing for everyone. They kept their work in the right position with their toes. For thread they made use of a muscle-cord taken from the back of a reindeer. It was so

strong that it never got broken.

Coats of skin were made, without buttons. These were put on over the head. Then there were trousers of skin and even skin stockings. They were made with the hair on the inside. Shoes were made of skin, with very thick skins for the under part.

Eskimo men are good at getting animals. While in Greenland in the long months of the Fall,

the white men and the Eskimos frequently went out after animals together. Their purpose was to get enough meat stored up for the days to come. One of the first animals they got was a beautiful snow-white deer with great horns. The second was a white bear of the North. This animal was such a size that he had to be pulled back to the



A white bear of the North.

ship over the snow. Then the men came across a group of *musk oxen*, and some of them were put to death as an addition to the winter's store of food.

A very important part in Peary's undertaking was taken by the Eskimo dogs. They were used for going after animals. It was by these dogs that the sledges were pulled which took Peary and his

) # men on their last journey to the Pole. They are strongly-made animals with a thick, soft coat. Their only food is meat, but they are able to do hard work with very little food. When they are in need of a drink, snow takes the place of water. However cold the weather is, the dogs go to sleep in the open. They get down into the snow, making themselves a warm covering of it. But they are strange animals. Sometimes in good weather, after a meal of good food, they go down in the snow and in a short time are dead.

Peary had got together about two hundred and fifty dogs. By the end of November almost a hundred were dead. Peary was very troubled by this, because it would not be possible to get to the Pole without the help of these animals. He made the discovery that the meat of the walrus was best for the dogs. It was important to keep them in good condition for the long pulls across the snow to the Pole.

In addition to the fear about his dogs, Peary had other troubles. The long Arctic night had come. It was dark in the morning and dark at night. Dark days came after days equally dark. It was hard to be happy when the sun never came out. Everyone had to be kept hard at work so that there would be little time to get sad.

By the end of January 1909 there was a feeble red light in the sky about the middle of the day. Peary saw that it was almost time for starting on the last great stretch of his journey. Then this man who was ready for any danger got the last details in order.

A small number of Peary's men, Eskimos, dogs,

and stores were taken off the Roosevelt. They were formed into little groups, under the control of one man, with sledges and dogs and three or four Eskimos. The first group went north for a certain distance. Those in this group did not take much with them. It was their business to make a way for the others. The second group went after the first with more stores. When it came up to the first, it made a snow house. The stores were put in it and the second group went back to the base. A third group went after the second, making a storehouse further on, and so on. Whenever a new group overtook the one which had gone first, it gave up its stores to the one in front and went back again.

The idea was to keep stores and help at certain places where they would be needed. In addition, this system made the journey less hard for Peary and his group, who came last. A road had been made for them. The dogs went better over the snow stamped down by the coming and going of the others, and the way back would not be so hard to see. Further, no time had to be wasted by Peary and his group in building snow houses.

This work had been done before.

For a day's journey a man was given a pound of 'pemmican' (meat, fat, and garden produce made into a solid cake), a quarter of a pound of tinned milk, half a pound of tea, and about a pint of alcohol for cooking his food. The food was put on a sledge, with a change of shoes and a small skin for a bed-cover. There was food for the dogs and other things. When everything was on the sledge it was a great weight.

Do not make the error of picturing these men being pulled in comfort in their sledges. Most of the time they went on foot. Frequently they had to get the sledges lifted over great masses of ice. They had to keep watching all the time for places where the ice was thin. Sometimes the ice was broken by narrow rivers. It was hard to get the sledges across without everything going into the water.

Then there were days of pushing on against thick, driving snow. The dogs became tired. The men had to keep talking kindly to them to get them to go on. Sometimes it was necessary for the long whip to be cracked across their backs. Sometimes they went down in the snow, dead. Sometimes a dog had to be put to death because he was no longer able to do his part of the work and there was not enough food to give him any.

After such hard days, there were no warm houses to come to at night. In place of that, the tired men had to go on their hands and knees into houses made of solid snow. There they went to sleep on snow floors. Their faces were cracked from the sharp winds. Their bodies were thin and very tired. But they kept on. Not once did they give up hope.

At last, in April 1909, Peary got to the stoppingplace farthest north. This was his starting-point. for the last hundred miles across the ice-covered waters of the Arctic Ocean. Peary took with him four Eskimos and one of his little band, Matthew

Henson, a black man.

3

They went as much as thirty miles a day. At last they were near the Pole. That last night the little group were so worked up that they did not get much sleep. They got up early, and in two or three hours they were at the North Pole at last. There was nothing to make this place seem any different from the ice and snow they had been seeing for months and months. It was only his instruments which made it clear to Peary that he was at the Pole.

Then the flag of the United States was planted by Peary. The flag was one which Mrs. Peary had given him. He had taken it with him on such a number of journeys! At last he was able to do with it what he had been hoping to do for such a long time! A bottle was placed between thick bits of ice. In this bottle Peary put a short account of what he had done. Then, though there was no post to send it by, he put the great news on a postcard to Mrs. Peary. It said:

""MY DEAR JO,—I have done it at last. Have been here a day. Starting for America and you in an hour. Love to the little ones.

BERT."

AMUNDSEN

THE United States was not the only country whose sons had a desire to get to the North Pole. In Norway there was a young man, Roald Amundsen, who had been getting ready to make a journey to the far North. In fact, he had got a ship for that purpose. Then came the great news, sent out by 'radiogram' and cried by newsboys in the streets, "Peary's discovery of the North Pole!" Another man had got there first.

Amundsen did not give up his idea of making discoveries, however. Like the old Vikings of his country, he had a great desire to go to strange parts. When he was still a boy he was training himself for his great work. In the cold winters of Norway, he went to sleep with his windows wide open. He took long walks over rough country. He became expert on 'skis'—those long, narrow Norwegian snow-shoes on which it is possible to make great jumps through the air. And so, in a number of ways, he made himself strong and hard.

It had been the hope of Amundsen's mother that her son would become a medical man. The young man took up medical science for two years, but his heart was not in that work. After the death of his mother, Amundsen went back to his first love, the sea. He made a journey far south into the Antarctic Circle.

Then, as chief of his ship, Amundsen, with seven men, took his small boat, only seventy-two feet long, through the North-west Passage. Amundsen had an equally good knowledge of the north and the south of our earth.

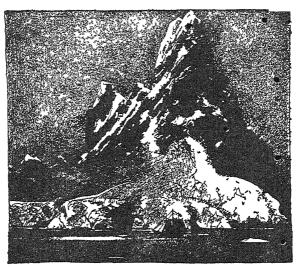
Being unable now to make a name for himself by going to the North Pole, Amundsen made the decision that he would go to the South Pole. He would be the first white man to get to the point farthest south on the earth.

Amundsen kept his designs secret. He said nothing to anyone but his brother and the man in control of his ship, the *Fram*. Even the sailors had no idea that they were to go south till they were well on their way.

Like Peary, Amundsen took great care to have everything right for the journey. His food and clothing, the sledges for transporting his goods over the snow, and the leather bands for the dogs by which the sledges were pulled—all were ready for the coldest of weather and the hardest sort of work. Amundsen took his Eskimo dogs with him from the North. He was troubled about the effect of the heat on these animals of the North - while the ship was going through the middle part There were, in fact, a number of of the earth. deaths among them, but later some of the others gave birth to young. By the time the band was in its winter living-place, Amundsen had more dogs than he had had at the start.

In January 1922 the Fram went across the

Antarctic Circle. Amundsen was going in the direction of the Ross Ice Barrier, which is between the Ross Sea and the South Pole. This is a place where the ice is so thick that it never becomes soft. It is as solid as land. The Barrier is so long and



Sharp slopes, some low and some very high.

so wide that the great mass of ice would go from -

edge to edge of California.

Where the Barrier goes into the sea it is edged with sharp slopes, some low and some very high. In some parts of the Barrier there are hollow places with beautiful colours on the walls—blue, green, and red-blue. At one end of the Barrier,

the west end, there is a burning mountain, so high that it may be seen a hundred miles away. Sometimes it sends out boiling steam. Frequently at

night it is a deep, bright red.

Amundsen went into the Bay of Whales and made the selection of a place on the Barrier not far from the sea. A little snow house was put up. It was about half the size of a schoolroom. It had one bedroom, which, in addition, was used for meals, and a cooking-place. The food was taken on sledges from the ship to the house and safely stored.

Outside the house, workrooms were made in the snow. These were joined to the house by archways of snow. Here, all the long winter, Amundsen's men were working on the sledges and the leather bands of the dogs. They were getting everything ready for the last part of the great

' journey to the South Pole.

In Amundsen's undertaking, as in Peary's, an important part was played by the Eskimo dogs. These dogs in their relations with men are frequently good-humoured, loving animals, but when there is a fight between them it is a fight to the death. Sometimes the fight may be about a bit of meat. Frequently it is caused by the feeling that one is getting more attention than another.

Fighting is the law of the Arctic, north or south. One has to make a fight for existence. One has to make a fight to come out on top. Amundsen's first move in his fight for the South Pole was to put down three stores of food at different points on the way they were going.

Black flags were planted by the side of the way so that on the journey back it would be clearly marked.

The first store was quickly put down, and the dogs came back at a good rate. On the last day they did sixty-two miles. The two farther cores gave more trouble. The weather was cruelly cold. The ice was so sharp that the dogs' feet

were cut by it.

After the food stores had been got ready, Amundsen and his men were kept waiting for better weather before starting for the Pole. It was a good thing they did not go while the weather was bad, because the last part of the journey was the hardest of all. Dogs went down dead on the way, or became so feeble that they had to be put to death. Then the group of five men had meals of dog meat. In addition, it was given to the other dogs. They were in such need of food that they would take anything. Even whips and boots were not safe from them.

The way to the Pole went up sharp slopes and down again. Up, then down! Frequently the men had to go in a line with a cord keeping them together, for fear of slipping and falling to their

death. At last they got to the South Pole.

It seemed right to Amundsen for every man of those who had undergone so much with him to have a part in the last moving act of planting Norway's flag. In his book named *The South Pole* he says:

"They were five rough hands, with the marks of hard work and of the cruel cold upon them,

by which that flag-stick was gripped, lifted in the air, and planted as the first at the South Pole. . . . Ten eyes bright with pleasure and love of country were fixed on the flag unrolling itself with a sharp crack and waving over the Pole."

Then Amundsen has a quiet laugh at himself. "Was it possible for anything to be more upside down?" he says. " From my earliest years, my hopes had been fixed on the North Pole, and here

I was at the South Pole."

Peary made the discovery of one Pole, and Amundsen of the other. The parts of the earth they went to are as far away from one another as it is possible for two places to be. In some ways the two places are like one another, in other ways they are different. There are great masses of land -America, Europe, Asia-near the North Pole. The South Pole is hundreds of miles away from any country where men are living. America is the nearest, and that is over eight hundred miles away. When the sun is out all day and all night at the North Pole, at the South Pole it is dark for twenty-four hours. At the South Pole there are no rivers or stretches of water, and drinking-water has to be made from the snow.

At the North Pole one sees only a small number of birds. At the South Pole there is that strange bird the penguin. He has no power of flight, but what a good swimmer he is! He goes walking over the ice like a fat, short-legged person, or pushing himself from place to place on his stomach with the help of his strange 'wings' and

his feet.

Some of the penguins are as tall as vou are.

They are able to go about quite upright. In their black coats with white or yellow fronts they have the look of men in tail-coats. The penguin is interested in everything which goes on round him. And he is a good fighter. He will even make an attack on an Eskimo dog



They have the look of men in tail-coats

The discovery of the South Pole was not Amundsen's last great experience. One night he was in his room in a New York hotel. He went to the telephone in answer to the bell. A strafige voice came over the wires. It was that of Lincoln Ellsworth, a young man with so much money that he might have done nothing all his days. It

was more to his taste, however, to make use of his money and take the chance of death by going on journeys of discovery. He made the suggestion to Amundsen of a flight by airplane across the North Pole.

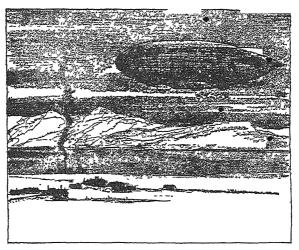
There is no need to say how pleased Amundsen was. Here was his chance to get to the North Pole, which had been his desire from the time he was a boy. More, here was a new way of attempting to get there which had not been used before.

The year after, the flight was attempted Two airplanes made a start from some islands off Greenland (Spitzbergen). But the wind took them out of their way. After eight hours in the air they had to come down because the engine was dry. The airplanes got fixed in the ice. It took twenty-five days of hard, hard work to get one airplane free. They had to give the other up. They went back, certain that they would be able to do better another time.

The year after, 1926, another attempt was made. This time in place of an airplane they took an airship like a great fish—a 'dirigible'—which had been made in Italy by an Italian named Nobile. It got to the North Pole and then went on over the Arctic till it came to Alaska. The ship had gone over three thousand miles in seventy-two-hours. But it had been bitingly cold so high up in the air. It was so cold that sleep was not possible. And the airship was all the time in danger from the ice caking on it. There was almost a ton of ice on its cords, guiding apparatus, and sides.

Two years later Amundsen again went to the

cold North. But this time it was with no thought of making a name for himself. He went to keep men from death. Nobile, the builder of the airship, was in trouble. With some of his countrymen he, in his turn, had made a flight across the North Pole.



They took an airship like a great fish.

On the way back his ship was smashed. The radio took up his cry for help and sent it all over the earth. The heart of the fighting Amundsen was moved by that cry. He had had experience of the ice-covered North. He had been face to face with its dangers and its gripping fears. He had to go in answer to that cry.

Amundsen made a start from Norway in a French airplane with five Frenchmen ready for any danger. There was never any news of them again. A bit of their airplane was seen in the sea months later. Amundsen had had his last great fight with the North. He had gone to his death attempting to take help to others who, like him, had given themselves for a great cause.

You have been reading about great men—men who have gone East, West, North, and South into strange seas and through strange lands. Only a small number of them got any reward, but because of what they did you are better off, safer,

and happier.

THE END

LIST OF SPECIAL WERDS

(These are names of plants and animals.)

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